In the Claims

Please replace all prior versions, and listings, of claims in the application with the following list of claims:

1. (Original) A method comprising:

inserting a surgical instrument into a surgical field of a patient;

creating a liquid jet with the surgical instrument;

driving rotation of a rotatable component of the surgical instrument with the liquid jet;

contacting a rotating surface of the rotatable component with a selected tissue of the patient; and

grinding, cutting, or abrading the selected tissue with the rotating surface.

2 (New) The method of claim 1, wherein the rotatable component comprises a grinding burr.

3. (New) The method of claim 2, wherein the selected tissue comprises bone.

4. (New) The method of claim 1, further comprising, after the grinding act, an act of:

evacuating at least a portion of any debris and fragments of the selected tissue generated during the grinding step from the surgical field.

5. (New) The method of claim 1, further comprising:

supplying a rotatable shaft in the instrument, the shaft having a distal end, which includes the rotatable component, and a proximal end;

coupling the proximal end of the shaft in driving engagement with a rotatable rotor positioned within a body of the surgical instrument, such that when the instrument is in operation, rotation of the rotatable rotor causes a corresponding rotation of the rotatable shaft;

providing a pressure lumen having a proximal end, and a distal end that is contained within the body of the instrument, the pressure lumen having sufficient burst strength to conduct

a high pressure liquid, the distal end of the pressure lumen including a nozzle therein that is shaped to form the liquid jet as a liquid at high pressure flows therethrough; and

directing at least a portion of the liquid jet emanating from the nozzle so that it impacts a surface of the rotatable rotor, thereby driving rotation of the rotor.

6. (New) The method of claim 1, further comprising after the creating act, an act of:

directing the liquid jet towards a jet-receiving opening in an evacuation lumen of the surgical instrument.

7. (New) The method of claim 6, wherein the evacuation lumen is shaped and positioned to enable evacuation of liquid comprising the liquid jet from the jet-receiving opening to a proximal end of the evacuation lumen without the need for an external source of suction.

8. (New) The method of claim 5, further comprising:

supplying a sheath having a proximal end and a distal end, the sheath surrounding at least a portion of the rotatable shaft.

9. (New) The method of claim 8, further comprising:

providing the proximal end of the sheath in fluid communication with an external source of suction to enable evacuation of tissue fragments and debris from a region of the surgical field surrounding the rotating surface of the rotational component.

10. (New) The method of claim 8, wherein the rotatable shaft is constructed and arranged to generate an evacuation force tending to drive liquid and debris from the distal end of the sheath towards the proximal end of the sheath.

11. (New) The method of claim 1, wherein the surgical field comprises the joint capsule of a patient.

12. (New) The method of claim 1, further comprising:

providing a liquid jet-driven rotor to drive rotation of the rotatable component; and

providing a housing to contain the liquid jet-driven rotor, the housing being in fluid communication with a source of suction able to remove liquid from the housing during operation of the instrument.

13. (New) The method of claim 5, wherein the nozzle is positioned so that the liquid jet impacts a surface of the rotatable rotor, thereby imparting rotational motion to the rotor, such that there is essentially no change in hydrostatic pressure of the liquid comprising the liquid jet, while in contact with the rotor, when the instrument is in operation.

14. (New) The method of claim 1, wherein the creating act further comprises:

supplying a high pressure liquid to the surgical instrument to form the liquid jet, wherein the high pressure liquid is supplied at a pressure of at least 500 psig.

15. (New) The method of claim 14, wherein the high pressure liquid is supplied at a pressure of at least 5,000 psig.

16. (New) The method of claim 15, wherein the high pressure liquid is supplied at a pressure of at least 10,000 psig.

17. (New) The method of claim 16, wherein the high pressure liquid is supplied at a pressure of at least 15,000 psig.

18. (New) The method of claim 17, wherein the high pressure liquid is supplied at a pressure of at least 30,000 psig.